

**I CLAIM:**

1 1. In a computer system connected to an external communications medium, a  
2 security device comprising:

3 a programmable firewall device interposed between the computer system and  
4 the external communications medium;

5 a controller device configured within the computer system such that said  
6 controller device can access all communications into and out of the computer system  
7 and can control the firewall to block communications between the computer system and  
8 the external communications medium when an attempted security breach is detected;

9 a communications device for communicating instructions from said controller  
10 device to said firewall device for controlling said firewall device; wherein

11 said controller device examines communications incoming to the computer  
12 system to detect attempted security breaches; and

13 the controller device continuously controls the firewall during the operation of the  
14 computer system to block communications between the computer system and the  
15 external communications medium when an attempted security breach is detected.

16 2. A computer program product which includes codes on a computer readable  
17 medium wherein codes are being executed by a computer system, comprising:

18 a detect code operation performed by the codes on the computer readable  
19 medium wherein known improper code is detected; and

20 a detect patterns operational routine performed by the codes on the computer  
21 readable medium wherein a pattern of activity is detected over time.

22 3. The computer program product of claim 2, and further including:

23 a weighting operation performed by the codes on the computer readable medium  
24 wherein a weight is assigned to a detected security breach.

1 4. The computer program product of claim 2, wherein:

2 a firewall is automatically reprogrammed by the codes on the computer readable  
3 medium.

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2 5/ A computer program product which includes codes on a computer readable  
medium wherein codes are being executed by a computer system, comprising:

3 at least one detect operation performed by the codes on the computer readable  
4 medium wherein a computer security breach is detected; and

5 a weighting operation performed by the codes on the computer readable medium  
6 wherein a weight is assigned according to the importance of the security breach.

1 6. The computer program product of claim 5, and further including:

2 a react operation performed by the codes on the computer readable medium  
3 wherein a firewall is reprogrammed in real time to react to the security breach.

1 7/ A computer program product which includes codes on a computer readable  
2 medium wherein codes are being executed by a computer system, comprising:

3 at least one detect operation performed by the codes on the computer readable  
4 medium wherein a computer security breach is detected; and

5 a react operation performed by the codes on the computer readable medium  
6 wherein a firewall is reprogrammed in real time to react to the security breach.

1 8. The computer program product of claim 7, wherein:

2 said react operation reprograms the firewall according to an assigned weight, the  
3 assigned weight being a function of the type of security breach detected.

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